Allied health in Central Australia: Challenges and rewards in remote area practice

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The aim of this descriptive study, undertaken in 1997, was to examine the professional environment and work practices of physiotherapists, occupational therapists and speech pathologists in public sector positions in Central Australia. All therapists identified in these positions were interviewed. The study indicates that incumbents value specific professional benefits associated with remote area practice, particularly the opportunity to work with Aboriginal people. However these recruiting advantages are diminished by a lack of management support - a key factor in the high turnover of staff. The findings of this study have implications for the development of strategies to improve support, and thereby retention, of allied health professionals and other workers in remote areas. **[Bent A (1999): Allied health in Central Australia: Challenges and rewards in remote area practice. *Australian Journal of Physiotherapy* 45: 203-212.]**

Key words: Allied Health Occupations; Northern Territory; Personnel Turnover; Rural Health Services

Introduction

Historically, there have been significant difficulties in recruiting and retaining occupational therapists, physiotherapists and speech pathologists in public sector clinical positions in remote areas such as Central Australia. The collective term allied health professionals (AHPs) is used to describe therapists in these three therapy disciplines. In the context of this study, the term Central Australia refers to the southern two-thirds of the Northern Territory (NT), the northern boundary being an oblique west-east line from Tanami, near the Western Australian border, to Borroloola on the Gulf of Carpentaria. This region covers an area of more than 830,000 km^2 - greater than the area of New South Wales (NSW) (Australian Bureau of Statistics (ABS) 1991). Central Australia is one of the most arid and sparsely populated regions of the nation. The total population of the region is approximately 43,000 - the majority living in the towns of Alice Springs with a population of 25,520, and Tennant Creek. with a population of 3,860 (ABS 1996(i)). Approximately 17,000 or about 40 per cent of the population is Aboriginal, the majority of whom live in small communities separated by vast distances (ABS 1996(ii)). The closest population centres of 25,000 people or more are the cities of Darwin and Adelaide, both approximately 1500km from Alice Springs.

Allied health professionals in remote area practice operate in very different working environments compared with their urban colleagues. Professional isolation, large caseloads with a limited number of service providers, and reduced access to resources, equipment and professional development are often quoted as the major challenges associated with remote area practice (Bent 1994, Bishop 1995, Hodgson 1995, Sheppard 1994). The literature identifies various perceived disincentives for health workers to work in rural and remote areas. These disincentives include: economic, professional, educational, family and social issues (Mara 1992, Mitchell 1995). However, some of these perceived notions seem to be disproportionately negative and even erroneous. The greatest difficulties identified by AHPs in public sector practice in Central Australia relate more to lack of supportive management systems than to economic and social issues.

In contrast with the challenges and perceived negatives, rewards and positive aspects of remote area AHP practice are also reported in the literature (Barker 1995, Bent 1994, Cantlay 1994, Olney 1997). Barker (1995, p. 94), describes in ebullient terms the multifaceted work of the Alice Springs Remote Health therapists: "We travel by four wheel drive over dirt roads and fly in light aircraft to remote isolated Aboriginal communities and homelands, to deliver services to people who have a different language,

Table 1. Allied health professional public sector positions in Central Australia.

Agency/location	Client group	Geographical area covered by AHP positions in agency	AHP positions in agency
Student services Alice Springs, NT	School-age children 4 - 18 years	Southern two-thirds of Northern Territory: approx. 830,000 km^2	Occupational Therapy x 1 Physiotherapy x 1 Speech Pathology x 2
Alice Springs Hospital	All ages / conditions	No work related travel	Physiotherapy x 2
Central Australian Rehabilitation Unit Alice Springs, NT	All ages - predominantly adult	Little work related travel	Occupational Therapy x 1 Physiotherapy x 1 Speech Pathology x 1
SEAT Clinic: Wheelchair provision Alice Springs, NT	All ages / conditions	Some travel to Tennant Creek 500 km north of Alice Springs	Occupational Therapy x 1 or Physiotherapy x 1
Community Health Adult team; Alice Springs, NT	Adolescent and adult clients	No work related distance travel	Occupational Therapy x 1 Physiotherapy x 1
Community Health Paediatric team; Alice Springs, NT	Paediatric clients 0 - 5 years	No work related distance travel	Occupational Therapy x 1 Physiotherapy x 0.6 Speech Pathology x 1
Alice Springs Remote Health Service	All ages / conditions	Southern half of the Northern Territory: approx. 547,000 km^2	Occupational Therapy x 1 Physiotherapy x 1
Barkly Health Service Tennant Creek, NT	All ages / conditions	Travel within Barkly Region: approx. 284,000 km^2	Occupational Therapy x 1 Physiotherapy x 0.5 Speech Pathology x 1

culture and lifestyle to our own. (Our region) covers an area of close to half a million square kilometres. We have every spectrum of our professions to cover ... a consultative clinical service for all ages and all clinical conditions, education for Aboriginal health workers and nurses, community development activities and research". Despite challenges and difficulties there is strong evidence that remote area practice can be enormously rewarding, especially in terms of cross-cultural service delivery, diversity of caseloads and opportunities to develop skills and knowledge in other areas. The questions underpinning this research are: What is different about remote area AHP practice compared with metropolitan or rural practice? What are the challenges and rewards, and how can professional effectiveness be optimised?

The purpose of this study was to examine the professional framework and work practices of therapists in public sector positions in Central Australia, to identify factors which contribute to recruitment and retention difficulties and to make recommendations for improvement in services. The study involved direct interviews with incumbents and examination of the relevant literature.

Method

The study population comprised all therapists (ie occupational therapists, physiotherapists and speech pathologists) in public sector clinical positions in Central Australia. There are 20 such positions (Table 1). Therapists in non-clinical, private sector or management positions were excluded. Research was undertaken in May 1997.

Therapists employed in the positions in Table 1 were telephoned prior to interview and invited to participate, with an explanation of the purpose of the study and a brief overview of the nature of the questions. Therapists were assured that their individual responses would remain confidential (that

Table 2. Respondents - demographic data.

	Therapy discipline	Gender	Age (years)	Marital status single/married	Experience at start of job	Previous remote/ rural experience	Length of time in position	(R)*
1	OT	Female	24	Single	1.9 years	Yes	8 months	
2	OT	Female	24	Single	2.0 years	Yes	6 months	(R)
3	OT	Female	26	Married	4.10 years	No	8 months	(R)
4	OT	Female	28	Single	5.10 years	Yes	6 months	(R)
5	OT	Female	31	Married	5.5 years	No	2.2 years	(R)
6	PT	Female	21	Single	3 months	No	2 months	(R)
7	PT	Male	22	Single	New grad	No	5 months	(R)
8	PT	Female	29	Single	6.0 years	Yes	1.5 years	
9	PT	Female	30	Married	4.7 years	Yes	3.10 years	(R)
10	PT	Female	40+	Married	> 15 years	No	3 months	
11	PT	Female	40+	Married	> 15 years	No	5.6 years	
12	PT	Female	40+	Single	> 15 years	Yes	7.5 years	
13	PT	Female	40+	Married	> 15 years	Yes	7.7 years	
14	SP	Female	23	Single	2.3 years	Yes	8 months	(R)
15	SP	Female	29	Married	6.0 years	Yes	1.5 years	
16	SP	Female	40	Single	1.5 years	Yes	2.7 years	
17	SP	Male	40+	Married	>15 years	No	1.8 years	
18	OT - Position vacant for 3 months							
19	OT - Position vacant for 3 months							
20	SP - Position vacant for 5 months							

Abbreviations: OT = Occupational Therapist; PT = Physiotherapist; SP = Speech Pathologist
(R)* = Respondent was intending to resign from the position within three (3) months of interview.

is, known only to the author) and that the study would not reveal any link between individual contributors and documented perceptions of professional needs, work practices and work related difficulties.

Ten open-ended questions on professional challenges and rewards, work practices, professional needs and social issues were put to each therapist in a face-to-face interview. The questions were developed following discussion with four AHPs in remote area practice. Responses were recorded verbatim and then checked for correct interpretation with the interviewee. Respondent checking served to enhance the accuracy of the case study by providing an opportunity for corrections and corroboration of the essential elements in the research results. The questions were analysed manually, using content analysis. Responses were organised into categories by grouping words or sentences corresponding to the same concept. Demographic data relating to the incumbents' years of experience and length of time in the position were also recorded.

Results

Of the 20 public sector discipline specific AHP positions in Central Australia, three were vacant at the time of interview. All therapists (n = 17) in public sector employment in Central Australia took part in the interviews. Table 2 provides demographic data pertaining to the respondents.

Responses to five questions focusing on the professional rewards and challenges of clinical AHP practice in Central Australia are presented in Table 3.

Table 3. Public sector allied health clinical practice in Central Australia.

Question	Response	Affirmative (*n*)	Responses (%)
1. What was/were the main reason(s) for you to take up a position within the public sector in Central Australia?			
	To work with Aboriginal people	8	47%
	To work in a remote area/Central Australia	7	41%
	Wanted permanent position	5	29%
	Diversity of work	4	24%
	Working with a specific client group	4	24%
	Partner decided to move to Central Australia	4	24%
	Attraction of P2 position for recent graduate	4	24%
2. Prior to commencing work in Central Australia what 'positives' did you hope for that subsequently eventuated?			
	Working with Aboriginal people	11	65%
	Working in a multi-disciplinary team	5	29%
	Job security	5	29%
	Opportunity to work in chosen specific field	4	24%
	Diversity of work/different models of service provision	4	24%
	The community spirit in a rural community	3	18%
	Setting up a new position	3	18%
3. Prior to commencing work in Central Australia what difficulties did you anticipate that subsequently proved to be true?			
	Limited peer support/professional isolation	6	35%
	Concerns about accessing resources	3	18%
4. What do you like about your job?			
	Clientele/clinical caseload	14	82%
	Diversity of work	10	59%
	Opportunity to develop knowledge/skills in other areas	7	41%
	The team/other people that therapist works with	7	41%
	Autonomy/flexibility	6	35%
	Challenge	6	35%
	Work related travel	6	35%
	Opportunity to develop and improve services	4	24%
5. What do you dislike about your job?			
	Insufficient staff for client needs	9	53%
	Management and organisational problems	9	53%
	Professional isolation issues	7	41%
	The need to cover for vacant positions	7	41%
	Lack of agency/community knowledge about the discipline	7	41%
	Time spent on administrative tasks and bureaucratic processes	6	35%
	Huge workloads requiring constant re-evaluation of priorities	6	35%

At interview: 47% (n = 8) of therapists indicated that they intended resigning from their positions within three months of interview.
Of these eight, 75% (n = 6) gave management problems as their main reason for leaving; two AHPs gave personal reasons alone for resignation.

Table 4. Professional development issues.

Aspect of PD/Question	Affirmative (*n*)	Responses (%)
Professional development - discipline specific:		
Have you been able to maintain professional expertise?	11	65%
Have you been able to develop professional knowledge?	11	65%
Have you been required to cover discipline specific specialist areas?	10	59%
Do you believe there is limited cross-fertilisation of knowledge?	7	41%
Professional development: non-discipline specific:		
Do you see knowledge of Aboriginal culture seen as very important?	8	47%
Do you believe non-clinical practical skills to be necessary or important? (eg four-wheel driving skills and information technology)	6	35%

Data on professional development is in Table 4 and data on social issues is in Table 5.

Discussion

There are a number of professional and social issues which, collectively, differentiate public sector AHP practice in Central Australia from metropolitan and rural AHP practice. Some of these factors may apply to other remote areas and include the following: a significant involvement with Aboriginal health; large clinical caseloads; service delivery to very large geographical areas for many positions; a wide range of client ages and/or conditions; professional isolation; difficulties in accessing professional development; a perceived lack of management support; a high cost of living (in Central Australia) and significant distances from family and friends interstate. These factors are discussed below in relation to various strategies to support effective service delivery in this remote area, and also in relation to the perceptions of remote allied health practice as identified in the literature.

Cross-cultural service delivery Given that approximately 40 per cent of the Central Australian population is Aboriginal, all agencies in this study are involved to a large degree in cross-cultural service delivery. Forty-seven per cent of therapists in public sector practice in Central Australia (n = 8) had specifically sought work with Aboriginal people and 82 per cent of respondents (n = 14) nominated their clientele and clinical caseloads as highly regarded aspects of their jobs. This latter figure indicates a clear endorsement for the rewards of cross-cultural service provision in this remote area. An understanding of Aboriginal culture, particularly as it relates to health, family structures and child rearing practices, is essential if allied health intervention is to be culturally appropriate and effective. Wakerman and Field (1998) also noted the need for remote area training for non-Aboriginal staff in Central Australia and cites various recent moves to address this need, including the Territory Health Services Aboriginal Cultural Awareness Program (ACAP) and locally accessible post-graduate remote area studies. These educational opportunities are enormously valuable and, in combination with the support of other workers in the field, especially Aboriginal health workers, medical, nursing and teaching staff, AHPs are better able to provide an integrated and effective service.

Large clinical caseloads It is generally accepted that there are significantly higher levels of morbidity amongst the Aboriginal population in Central Australia compared with national figures. This in turn increases the per capita need for AHP services in Central Australia. Fifty-three per cent of respondents (n = 9) identified insufficient staff for client needs as one of the most significant professional concerns. The issue of inadequate numbers of allied health positions

Table 5. Social factors

Question	Response	Affirmative (*n*)	Responses (%)
1. What social factors could attract applicants for AHP practice in Central Australia?			
	General lifestyle in Central Australia.	8	47%
	Good range of leisure interests	7	41%
	Excellent range of sporting opportunities	5	29%
	Friendships	3	18%
	Good climate	3	18%
2. What social factors could inhibit applicants for AHP practice in Central Australia?			
	High cost of living	11	65%
	Cost of travel to other states	11	65%
	Family ties in other states	4	24%
	Limited resources	4	24%
3. What social factors could influence applicants either way depending on the situation?			
	Employment opportunities for partners	5	29%
	Relationships	4	24%

in remote areas is noted in the literature. Bishop (1995, p. 15) commented: "The major problem relating to recruitment in rural and remote areas is the lack of positions to be filled." A secondary negative effect of inadequate positions can occur when the constant frustration of not being able to provide an adequate breadth and depth of professional service significantly reduces job satisfaction and thus limits retention. In addition, when positions are vacant, often for significant lengths of time, even greater burdens are placed on existing personnel. Agencies must consider the number of positions and the structure of allied health services when identifying realistic health outcomes for client groups serviced.

Large geographical areas Fifty-three per cent of the therapy positions in Central Australia ($n = 9$) cover immense geographical areas (Table 1) requiring long distance travel, usually by road. Inevitably much of the work of these AHP positions is advisory and relies on the support of local people in remote communities including health clinic staff (nursing sisters and Aboriginal health workers), bush teachers and Aboriginal assistants in schools. Appropriate liaison and clear communication with clients and support staff regarding therapy objectives and programs is vital to the success of therapy interventions. In addition, careful prioritising of workloads and analysis of timeframes is necessary to maintain equity of service to all clients. Although time consuming and often tiring, bush travel can be regarded as a "plus". Sixty-seven per cent of the respondents whose positions required bush travel ($n = 6$) commented that they particularly enjoyed the work-related bush travel and the opportunity to see the spectacular country of Central Australia.

Diversity of service provision In most instances, AHP positions in this study are as sole representatives of a particular discipline within an agency or program (Table 1). Many positions cover a wide range of client ages and/or conditions. Remote area therapists, whilst not specialists in one particular area of clinical practice, in many instances become "expert generalists" in the sense that they are required to have the capability to provide services to a client group

with a wide variety of diagnoses and therapeutic needs. Fifty-nine per cent of respondents (n = 10) nominated the diversity of clinical practice and the opportunity to develop new areas of their professional knowledge as aspects of their work that they particularly valued. Fifty-nine per cent of respondents (n = 10) felt that they had to cover discipline specific areas that in metropolitan practice would be provided by specialists. "They require a broad base of skills that allows them to be largely independent of specialist advisers" (Sheppard 1995, p. 62). Most AHP positions in this study are not appropriate positions for new graduates, due to the depth and breadth of knowledge required for successful management of caseloads. Even for therapists with experience, management structures must support access to specialist information when it is needed.

Professional isolation and the importance of networking and communication In a national survey, Hodgson and Berry (1993) found that interdisciplinary co-operation and wider networking are integral to survival in rural AHP service delivery. These support structures are even more critical in this remote setting where 41 per cent of respondents (n = 7) identified professional isolation as one of their greatest concerns. Bent and Sandral (1995) affirmed the importance in Central Australia of a collaborative approach, both within and across agencies, to achieve optimal service delivery. Shared work practices (for example bush trips and in-servicing) and networking at local and interstate levels are also helpful. Sheppard (1995) commented on the increased stress and the feelings of isolation of AHPs in remote area practice. Professional isolation can be reduced by the development of management supported professional liaison structures such as inter-agency mentoring. The use of information technology systems to enhance communication and also as a medium for professional development needs further investigation and utilisation. Videoconferencing in medical fields has been shown to provide a useful tool for improving information flow, with clinical and educational uses being particularly relevant to remote Australia (Sen Gupta et al 1998). There is potential for greater use of such information technology within allied health fields in Central Australia for patient assessment/management as well as professional development.

Access to professional development The difficulty in accessing discipline-specific professional development (in particular workshops, courses, clinical in-services and conferences) was highlighted by therapists as a significant problem in remote area practice. The main inhibiting factors nominated were: the cost of interstate travel and the time away from the job (an understandable concern given that most are sole practitioners). Thirty-five per cent of therapists in Central Australia (n = 6) felt that they had not been able to maintain and update their knowledge and skills in core service delivery areas and 41 per cent (n = 7) felt that they were disadvantaged by lack of cross-fertilisation within a discipline, due to the paucity of positions. The National Rural Health Group of the Australian Physiotherapy Association (APA) recognised the need for broad spectrum professional development: "in isolated rural or remote Australia, there are two fundamental levels of knowledge required for the delivery of effective services for consumers. The first ... is the domain of the specific profession; that is *clinical and practical therapy skills*. The second involves the essential knowledge required to effectively deliver these clinical and professional skills to clients and communities; that is *contextual service delivery skills* which enable a therapist to be optimally effective in a remote area as opposed to a metropolitan setting" (APA 1996(i), p. 3). Management must recognise these broad range needs and provide support for appropriate professional nourishment and development.

Perceived lack of management support Fifty-three per cent of respondents (n = 9) claimed management and organisational problems to be of major concern to them. Issues identified by respondents included: a lack of understanding by management and agencies of AHP services, skills, knowledge and roles; inadequate or even absence of orientation processes; significant delays in instigating recruitment processes leading to gaps in services and extra burdens for other AHPs; barriers to service delivery due to inadequate resourcing and inappropriate infrastructure; unrealistic workloads and little or no support for discipline specific professional development. In a national survey, Harris (1992) found that 49 per cent of rural AHPs will have been in their positions for less than two years. In Central Australia, as of May 1997, the figures were higher: 65 per cent of AHPs (n = 11) had been in their positions for less than two years. This figure tends to support the idea of a high turnover rate of AHPs in remote area practice as identified by Bishop (1995) and Sheppard (1995). Bishop (1995, p. 15) suggested that the very high turnover rate of AHPs in remote area practice is due to "(lack of) education, training and professional support, hostile or non-supportive management

structures, a lack of an identified career pathway and personal isolation." Forty-seven per cent of AHPs in public sector practice in Central Australia (n = 8) revealed at interview that they were intending to leave within three months - this subsequently eventuated. Of these eight AHPs, 75 per cent (n = 6) gave their main reason for leaving as lack of management support. All AHP positions in this study are managed by non allied health (as specifically defined for this study) personnel. Whilst management practices are not necessarily related to the professional discipline of the manager, the structure of an organisation or agency can further alienate or isolate employees who are sole representatives of their discipline in an agency where the majority of employees are from other disciplines. In most agencies employing allied health professionals in Central Australia, the vast majority of employees are nurses, doctors and administrative staff. In October 1996 the APA published a Position Statement on "Sole Rural and Remote Physiotherapists". Whilst the document was written for the physiotherapy profession, the issues raised apply equally well to other allied health professions: " ... sole rural and remote practitioners will often be alone in the analysis, planning, submission, preparation, implementation and evaluation of developments in physiotherapy services. Physiotherapists need the ability to understand and interpret community needs and ... the ability to work unsupervised and with initiative in meeting those needs" (APA 1996(ii), p. 1). It is imperative for management to understand and be supportive of the specific service delivery functions and needs of the AHPs they manage, in order to facilitate effective AHP service delivery within their agency.

Social factors Although 65 per cent of respondents (n = 11) nominated the high cost of living and the cost of travel to other states as being significant disincentives to live in Central Australia, none of the respondents identified salaries as a concern. It may be that the slightly higher public sector AHP salary ranges in the Northern Territory might be seen as helping to compensate for the increased cost of living. Forty-seven per cent of respondents (n = 8) nominated general lifestyle factors (including leisure activities and climate) as being important reasons for working in Central Australia. It may be that these "positives" could be better advertised to attract AHPs to work in Central Australia.

Comparison of the perceptions of non-metropolitan AHP practice as identified in the literature with the realities of remote area AHP in Central Australia In an extensive study of NSW physiotherapy undergraduate students, Mitchell (1995) sought to identify perceived reasons which would or would not attract graduates in physiotherapy to rural practice. The data from interviews with therapists in public sector employment in Central Australia indicates some variance between the realities of remote area practice as identified by the incumbents and Mitchell's findings with respect to rural practice. These differences might indicate a general lack of understanding of the realities and rewards of rural and remote AHP practice, especially with respect to very remote AHP practice in Central Australia.

Mitchell (1995) found that seven of the top 10 ranked inhibitors related to social factors including separation from family and friends, long distances to travel and lack of entertainment in rural areas. AHPs in Central Australia acknowledged separation from family as a negative but as a plus, identified locally available leisure activities as very good; they identified the *cost* of travel rather than *distance* as a significant negative. Mitchell (1995) found that undergraduates identified three major profession-related reasons for not entering rural practice: more varied employment available in the cities, lack of professional contact, and the view that experience in a city hospital is more highly regarded. Therapists in Central Australia in public sector employment perceived the most concerning professional issue to be insufficient therapy positions to cater for regional needs. Other significant problems identified by AHPs in Central Australia were: lack of management support; organisational barriers; professional isolation and difficulties in accessing appropriate professional development.

Mitchell (1995) found that the top five ranked reasons for entering rural practice pertained to social rather than professional factors: relaxed lifestyle; healthier lifestyle; no pollution; see more of Australia; and a less stressful lifestyle. Professional independence was the only professional reason identified in his study for entering rural practice. In contrast, therapists in Central Australia in current public sector employment have clearly identified many significant professional positive aspects of their job including: clientele/caseload, diversity of work, autonomy and flexibility of the positions (especially for those whose jobs involved establishing a new position), the work-related bush travel, the opportunity to improve services and, for recent graduates, the opportunity for significantly higher remuneration than in

metropolitan positions. A "good lifestyle" was endorsed by 47 per cent of remote area practising therapists in Central Australia (n = 8) as a personal/social plus.

The findings of Mitchell's (1995) study seem to indicate a disproportionately negative perception held by undergraduate physiotherapists of rural and remote area practice. Undoubtedly there are real challenges but there are also many professional positives which need to be promoted in order to enhance recruitment. At undergraduate level, remote health studies and student placements in remote areas are two ways of developing an understanding of remote area practice within the allied health professions. The Rural Professional Issues Program offered by the University of South Australia's School of Physiotherapy has been found "to alter in a positive way, student attitudes towards rural practice as a valued career option... (and) all students who went on a rural placement found it to be a positive experience" (Hedges and Sheppard 1995, p. 70). Coman and Webb (1995) also endorsed the benefits of student placements but warned of the challenges for clinicians, including the time involved in the education and supervision of students and the difficulties with objective evaluation of student standards. Inter-agency undergraduate student placements, such as are currently available in Central Australia, help to share the clinical education load between sole clinicians and also allow students to be part of inter sectorial networking. Hodgson (1995, p. 1) commented: "Currently, we are in a phase of establishing that non metropolitan AHP practice is different - not inferior - requiring specialised, advanced skills which demand adequate remuneration, recognition and respect. If undergraduates have positive experiences in remote area placements and allied health professionals working in such areas promote the positives, recruitment will be enhanced."

Owen Allen, as Convenor of the APA's National Rural Issues Committee, is reported to have stated: "For therapists in rural and remote areas, the work can be very diverse, interesting and rewarding. Rural health should be looked upon as a developmental issue rather than a problem" (Olney 1997, p. 11). The provision of remote area allied health services might also be regarded as an evolving process with distinct differences from metropolitan and even rural practice, and with great potential for growth and development.

Conclusion

Remoteness is a dominant feature of life in Central Australia and contributes significantly to the professional challenges of providing optimal allied health service delivery. The findings of this study indicate that support from senior management in agencies providing health care services is a critical factor in the facilitation of professional effectiveness of allied health practitioners in remote areas. Identified support needs cover a range of professional issues which, in turn, influence recruitment and in particular, retention.

Recruitment will be facilitated by raising the profile of remote area practice within the allied health professions. This can be achieved by developing an understanding of the realities and rewards of remote area practice through the literature; by the provision of remote area studies in undergraduate AHP courses and inter-agency therapy undergraduate placements in remote area settings; and by the promotion of an understanding of AHP services and needs at executive levels within employing agencies.

Retention of AHPs in remote areas will be facilitated by informed and supportive management within agencies providing such health services. Important aspects of effective AHP management include: clearly defined roles and service goals for both AHPs and agencies; the establishment of adequate AHP positions for service needs; prompt and effective recruitment processes to avoid lengthy vacancies; comprehensive induction programs for new employees; collaborative decision-making within work teams; supported professional development, both discipline specific and in non-clinical contextual service delivery areas; the minimisation of professional isolation by the development of inter-agency professional liaison structures such as mentoring systems; and the provision of appropriate information technology systems for communication, client management and professional development.

Job satisfaction relates to intrinsic factors including being able to "do a good job" and being recognised for it. The responsibility for professional support in remote areas lies not just with the employer but also with the incumbents, their professional bodies, and educational institutions providing both undergraduate and post-graduate training for therapists in all disciplines. Future studies could utilise the findings of this research to compare the work practices and needs

of other professional workers in remote areas and to develop policies for improved support and retention.

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